Overview of Basic Principles: Transparency, Completeness, Data Quality, and Consistency

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Transparency

- What is the completeness of the assessment
- What are the underlying data and assumptions behind exposure estimates
- What are the uncertainties and data gaps in the exposure assessment
- Transparency is important because it improves confidence in the assessment conclusions

Characterizing Completeness

- Chemical Volumes - total and assessed
- Manufacturing, processing and uses
- Exposures from environmental releases, consumer products or in the workplace
- Population-based exposure monitoring studies

Characterizing Completeness

- Characterizing the completeness of the exposure assessment is important because it will convey:
  - the scope of the assessment
  - what exposures were assessed
  - what exposures were not assessed
  - why exposures were not assessed

Important Elements for Characterizing Data Quality

- Monitoring Data
  - monitoring study objective and study design
  - exposure assessment objective
  - sampling methods
  - analytical chemistry methods
  - quality assurance and quality control
  - uncertainty

Important Elements for Characterizing Data Quality

- Exposure Models
  - modeling objective
  - model evaluation/model peer review
  - key inputs
  - model algorithm/assumptions
  - description of scenario
  - uncertainty

Important Elements for Characterizing Data Quality

Characterizing the quality of exposure estimates, whether based on monitoring data or models, is important because it will help inform decisions on whether an exposure estimate is of sufficient quality to adequately assess exposures, and ultimately risks, to children. The level of data quality needed will vary.

Consistency

- A consistent format is important because it allows reviewers to know where to look for important pieces of information such as:
  - completeness of the overall assessment
  - summary of release and exposure information by activity (mfg/processing/uses)
  - discussion of objective and elements of quality of individual exposure estimates
- Consistency should be balanced against flexibility